FINDING OF NO SIGNIFICANT IMPACT FOR THE PROPOSED AERIAL PORT SQUADRON FACILITY

In accordance with the National Environmental Policy Act (40 CFR Parts 1500-1508) and its implementing regulations, the United States Air Force has conducted an Environmental Assessment (EA) to evaluate the potential environmental consequences of the proposed construction of an Aerial Port Squadron Facility. This Finding of No Significant Impact (FONSI) and attached EA provide an analysis of probable impacts associated with the Proposed Action and its alternatives.

Description of Alternatives including the Proposed Action

- The Proposed Action involves construction of a 2400 square foot APS facility. The location of the proposed action is located between Building 977 and Building 939.
- No Alternatives were evaluated along with the Proposed Action. See Appendix B.

Summary of Environmental Consequences

The Proposed Action will not generate any significant impacts on any environmental resources. Construction of the new APS facility in the preferred location will not have any adverse effects on minority or low-income populations living near Travis Air Force Base. Potential for soil erosion during construction exists, but impacts would not be significant due to the short duration of ground disturbance during construction. Short-term impacts in soil erosion could lead to increased runoff and sedimentation in the storm drain system. Best Management Practices (BMPs) will be implemented to minimize impacts associated with soil erosion and sedimentation to keep them below significant levels. No impacts to native biological resources would occur. Due to groundwater contamination underneath the proposed site, digging must not go below 9.0 ft. The *Travis AFB 2001-2002 Annual GSAP Report* lists the closest monitoring well MW222x37 with a reported groundwater depth of 9.70 ft. The contaminated groundwater is at a depth that will not have significant impacts on the construction if the digging criteria is followed The use of hazardous materials and the resultant hazardous wastes must be anticipated during the construction of the APS facility. During the construction phase, contractors who bring in hazardous materials must manage them and their wastes according to the *Travis Air Force Base Environmental Policy for Contractors (2002),* as well as Federal, State and local regulations and policies. The contractor will ensure that hazardous material use is authorized, tracked, and managed in accordance with AFI 32-7086, *Hazardous Materials Management*, AMC Supplement 1, Chapter 2. Short-term impacts to air quality may occur from generation of fugitive dust during construction activities. Bay Area Air Quality Management District enhanced fugitive dust control measures will be implemented to minimize the impacts and to keep them below significant levels. Noise levels will increase slightly during construction, but will be less than ambient levels, which are affected by nearby aircraft operations.

Decision

As a result of the analysis of impacts assessed and analyzed, it is concluded that implementation of the BMPs during the construction phase of the project, will keep the impacts below significant levels. Therefore, a determination has been made that the Proposed Action does not represent a

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major federal action significantly affecting the quality of environment. Therefore, a FONSI is warranted and the preparation of an Environmental Impact Statement (EIS) is not required.

Michael L. Sevier

MICHAEL L. SEVIER, Colonel, USAF
Environmental Protection Committee, Chair
Vice Commander, 60th Air Mobility Wing

25 JUN 03

Date

60th Civil Engineer Squadron

Final Environmental Assessment
Aerial Port Squadron Facility
Travis Air Force Base, California

Prepared by
60th Civil Engineer Squadron/Environmental Flight
February 2003

FINAL
ENVIRONMENTAL ASSESSMENT
AERIAL PORT SQUADRON FACILITY PROJECT
TRAVIS AIR FORCE BASE

Prepared for:

TRAVIS AIR FORCE BASE
Solano County, California

February 2003

Prepared by:

U.S. AIR FORCE
60 CES/CEV
Travis Air Force Base, California

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ACRONYMS AND ABBREVIATIONS

AFB	Air Force Base
AFI	Air Force Instructions
AMW	Air Mobility Wing
APS	Aerial Port Squadron
AsA	Antioch-San Ysidro complex, thick surface, with 0 to 2 percent slopes
BAAQMD	Bay Area Air Quality Management District
bgs	below ground surface
BMP	Best Management Practice
CAA	Clean Air Act
CAAQS	California Ambient Air Quality Standards
CEQA	California Environmental Quality Act
CFR	Code of Federal Regulations
CO	Carbon monoxide
dB	Decibels
DIC	Dibble-Los Osos clay loams, 2 to 9 percent slopes
EA	Environmental Assessment
EIS	Environmental Impact Statement
ERP	Environmental Restoration Program
FONSI	Finding of No Significant Impact
H_2S	Hydrogen sulfide
mph	miles per hour
NAAQS	National Ambient Air Quality Standards
NEPA	National Environmental Policy Act
NO_x	Nitrogen oxides
NRHP	National Register of Historic Places
O_3	Ozone
Pb	Lead
$PM_{2.5}$	Particulate matter less than 2.5 microns
PM_{10}	Particulate matter less than 10 microns
ROG	Reactive organic gas
sf	Square feet
SFBAAB	San Francisco Bay Area Air Basin
SO_2	Sulfur dioxide
SO_4	Sulfates
SO_x	Sulfur oxide
TCE	Trichloroethene
USAF	United States Air Force
U.S.C.	United States Code
USEPA	United States Environmental Protection Agency
USFWS	United States Fish and Wildlife Service

EXECUTIVE SUMMARY

This Environmental Assessment (EA) has been prepared to assist the decision-making process for evaluating the Proposed Action of constructing an Aerial Port Squadron facility. This EA has been prepared in compliance with the National Environmental Policy Act (NEPA) of 1969, Council of Environmental Quality regulations, and 32 CFR 989, *The Environmental Impact Analysis Process*.

- This EA analyzes potential impacts of activities associated with implementing the Proposed Action and the No Action Alternative (Appendix B). The Proposed Action involves the construction of a new 2,400 square foot facility for the 60th Aerial Port Squadron (APS). The location of the Proposed Action is in the area bounded Ragsdale Road and Buildings 977 and 939 (Figure 2).
- This EA utilizes the Pacific Gateway Visitors Quarters EA. A copy of the Pacific Gateway Visitors Quarters EA can be found at 60 CES/CEV.

Environmental components addressed in this EA include geology and soils, water resources, biological resources, hazardous waste management, air quality, noise, and cultural resources. Environmental consequences of the Proposed Action are summarized below. Since current conditions would not change under the No Action Alternative, no impacts to environmental resources would occur.

Geology and Soils. No significant impacts are expected on regional geology. The proposed location of the project on a paved surface, and the short duration of ground disturbance during an approximately six-month construction period, would not have significant impacts.

Water Resources. No significant impacts are expected to regional water resources from implementation of the Proposed Action.

Biological Resources. No significant impacts are expected to biological resources from implementation of the Proposed Action.

Hazardous Waste Management. Any hazardous waste generated at the APS facility would be subject to the guidelines outlined in AFI 32-7086, *Hazardous Materials Management,* AFI 32-7042, *Solid and Hazardous Waste Compliance*, the *Travis Air Force Base Hazardous Waste Management Plan,* and the *Travis Air Force Base Environmental Flight Policy for Contractors*. Implementation of these guidelines would ensure that no significant impacts occur because of hazardous materials use and hazardous waste disposal. No significant hazardous materials or wastes issues are anticipated with the APS facility. Groundwater under the proposed site is contaminated with Trichloroethene (TCE). BMPs will be implemented during the soil excavation phase. The use of hazardous materials and the resultant hazardous wastes must be anticipated during the construction of the APS facility. During the construction phase, contractors who bring in hazardous materials must manage them and their wastes according to the *Travis Air Force Base Environmental Policy for Contractors,* as well as Federal, State and local regulations and policies. The contractor shall ensure that hazardous material use is

authorized, tracked, and managed in accordance with AFI 32-7086, *Hazardous Materials Management*, AMC Supplement 1, Chapter 2.

Air Quality. Short-term impacts to air quality might occur from generation of fugitive dust during construction for either the Proposed Action. The Bay Area Air Quality Management District (BAAQMD) enhanced fugitive dust control measures would be implemented to minimize the impacts and to keep them below significant levels.

Noise. Noise levels would increase slightly during construction, but would be less than ambient levels, which are affected by the aircraft operations nearby. Impacts would not be significant for the Proposed Action.

Cultural Resources. Cultural resource surveys of the proposed sites did not identify any pre-historic or historic resources on the proposed project site. Therefore, no impacts to cultural resources are expected.

Environmental Justice. There are no minority or low-income populations on Travis Air Force Base. The closest non-military community is 5 miles from the proposed site. Based on the review of the project there will be no impacts that will affect minority or low-income groups.

Cumulative Impacts. No significant impacts would occur from the proposed action or the alternative action. As previously noted throughout this assessment, minor environmental impacts would occur during the period of construction but would not be of a lasting nature. As with this project, other projects have had or could have minor temporary impacts on the environment as noted in their associated environmental analysis. The most lasting impacts would be impacts to water and air. Cumulative impacts to water resources would be the effects of soil erosion on Union Creek or contaminated ground water that may come to the surface. Groundwater contamination is located beneath the proposed site at approximately 9-12 ft below ground surface, and would not be present at foundation depths. Best management practices would be instituted to prevent the runoff of disturbed soil from getting out of the construction area. The construction area does not have contaminated soil in accordance with the Environmental Restoration Program map. Fugitive dust from construction sites over time has the potential to increase the particulate material in the air. However, use of required best management practices during soil disturbances keeps these impacts to an insignificant level. Overall, the construction occurring at Travis AFB primarily involves in fill activities with only a few projects actually expanding the development footprint on the installation. Therefore, the cumulative impacts of the proposed action are insignificant.

1.0 DESCRIPTION OF PROPOSED PROJECT AND ALTERNATIVES

This Environmental Assessment (EA) has been prepared in compliance with the National Environmental Policy Act (NEPA) of 1969 as amended (42 U.S. Code [U.S.C.] 4321-4370d), Council on Environmental Quality regulations implementing the procedural provisions of NEPA (40 Code of Federal Regulations [CFR] 1500-1508), and 32 CFR 989 regulations implementing the Environmental Impact Analysis Process (EIAP). The purpose of the EA is to provide the U.S. Air Force (USAF) with sufficient information to determine if a Finding of No Significant Impact (FONSI) is supported for the Proposed Action or whether an Environmental Impact Statement (EIS) must be prepared. The following sections provide background information including the purpose of and need for the Proposed Action, the location of the Proposed Action, and relevant environmental issues and scope.

1.1 PURPOSE AND NEED OF PROPOSED PROJECT

The 60th Air Mobility Wing (AMW) is the host unit at Travis Air Force Base (AFB). The 60th Aerial Port Squadron (APS) mission operates the primary west coast strategic aerial port and the commercial passenger gateway at Los Angeles International Airport with a budget of $3.6M. Over 300 assigned personnel support passenger and cargo movement on channel, special assignment, joint training, exercise, and contingency missions. The 60th APS provides and maintains a worldwide unit deployment capability.

1.1.1 Purpose of Proposed Project

The proposed project is to construct a new APS facility that will conform to airfield siting standards and will clear the airfield waiver associated with the current location.

1.1.2 Need for the Proposed Project

The current APS facility was built in the 1980's as a temporary facility until a new facility could be funded. The current facility is approximately 1400 sf and is inadequate in size for the more than 80 personnel who occupy the building. The current facility has no running water and no restrooms. Because personnel are required to stay in the immediate work area during their entire shift, the unavailability of these amenities constitutes a serious quality of life/morale issue. The current location is also in close proximity to an active parking ramp and requires an airfield waiver.

1.2 LOCATION OF PROPOSED PROJECT

Travis AFB occupies 5,422 acres east of Fairfield and Suisun City in Solano County, midway between San Francisco and Sacramento (see Figure 1-1). The base is surrounded primarily by agricultural or range land, although residential and commercial development has occurred in the cities of Vacaville and Fairfield, located north and west of the base, in recent years.

The site for the Proposed Action is located south of Ragsdale Road and is between Buildings 977 and 939. (see Figure 1-2).

1.3 ALTERNATIVES TO THE PROPOSED ACTION

This environmental assessment only discusses the Proposed Action and No Action Alternative. For more information on this please see Appendix B.

1.3.1 Alternative 1: No Action Alternative

Under the No Action Alternative, no building would be constructed and the current APS Ramp Facility would stay as is.

1.4 RELEVANT ENVIRONMENTAL ISSUES AND SCOPE

Environmental resources that were evaluated relative to the Proposed Action and No Action Alternative include geology and soils, water resources, biological resources, hazardous waste management, air quality, noise, and cultural resources. This assessment excluded any evaluation of traffic because the proposed project does not involve any increases to base personnel roads or their usage.

1.5 ORGANIZATION OF THIS ENVIRONMENTAL ASSESSMENT

This EA presents an interdisciplinary analysis of potential impacts associated with the Proposed Action and alternatives. Potential environmental issues identified in Section 1.4 are the focus of this analysis. Chapter 2.0 describes the existing environment that may be affected by the Proposed Action and No Action Alternative. Chapter 3.0 evaluates potential environmental consequences that may result from implementation of the Proposed Action and No Action Alternative and compares potential environmental consequences. Consultations made in the conduct of the analysis, list of persons who prepared the document, and references to documents used are provided in Chapters 4.0, 5.0, and 6.0, respectively. Figures and tables are grouped separately following the text.

2.0 AFFECTED ENVIRONMENT

This section describes relevant resource components of the existing environment at the Proposed site at Travis AFB. This existing environment forms the baseline conditions that provide the basis for identifying and evaluating environmental effects that would result from implementation of the Proposed Action or No Action Alternative.

2.1 GEOLOGY AND SOILS

This section describes the regional geology for Travis AFB and the soils expected at the Proposed site.

2.1.1 Geology

Travis AFB is located along the western boundary of the Central Valley Physiographic Province of California. The Central Valley is a sediment-filled synclinal basin, with a northwest- to southeast-oriented axis. West of the base is the Coast Range Physiographic Province, which generally consists of folded and uplifted bedrock (USAF 1995).

Bedrock units recognized near Travis AFB include (from oldest to youngest) the Domengine Sandstone, Nortonville Shale, Markely Sandstone, and Neroly Sandstone. A surface trace of the Vaca fault has been mapped from northwest to southeast and is located along the northern-central perimeter of the base. Past tectonic processes folded and uplifted the bedrock to form the hills and mountains to the north, west, and south of Travis AFB. Topographic highs on Travis AFB are composed of relatively erosion-resistant Markley Sandstone and Domengine Sandstone. Erosion of the less-resistant bedrock units formed low areas that were later filled with alluvium. The alluvium generally consists of sand, silt, clay, and minor gravel. It is divided into older and younger alluvium. At Travis AFB, the alluvium ranges in thickness from 0 feet to about 70 feet. West of Travis AFB, the alluvium thickness increases to greater than 200 feet.

2.1.2 Soils

Soils at the Proposed site are described in the Solano County Soil Survey (Soil Conservation Service 1977) to consist of the Antioch-San Ysidro complex, thick surface, with 0 to 2 percent slopes (AsA) and the Dibble-Los Osos clay loams, 2 to 9 percent slopes (DIC). The AsA complex is 55 percent Antioch loam, 35 percent San Ysidro loam, and 10 percent clayey subsoil at depths of 20 inches. The DIC complex is 60 percent Dibble clay loam and 30 percent Los Osos clay loam. The remaining 10 percent consists of miscellaneous soil types. Both the Antioch loam and San Ysidro sandy loam are formed on terraces in alluvium derived from sedimentary rocks. They are shallow, moderately well-drained soils, with very slow permeability, slow runoff, and low available water capacity. Both soil types are susceptible to erosion. The Antioch loam has slightly concave slopes, and the San Ysidro sandy loam has slightly convex slopes. Both the Dibble clay loam and the Los Osos clay loam are well drained soils that are underlain by sandstone at a depth of approximately 20 to 40 inches. Slopes for both are from 2 to 50 percent and permeability is slow.

2.2 WATER RESOURCES

This section describes regional groundwater resources around Travis AFB. There are no surface water resources near the proposed project site. The nearest wetlands are located approximately 800 feet north of the proposed project site across from Ragsdale Road.

2.2.1 Groundwater

Primary water-bearing deposits in the region surrounding Travis AFB are coarse-grained sediments (sand and gravel) within the alluvium. In the area surrounding the proposed project area, depth to the unconfined groundwater aquifer varies seasonally from about 12 feet below ground surface (bgs) to 30 feet bgs. Bedrock units beneath the base do not yield groundwater of usable quantity or quality. Groundwater recharge occurs from direct infiltration of rainfall and from infiltration of runoff through local stream and creek beds (USAF 1998).

Generally, the local groundwater gradient beneath Travis AFB is to the south, as is the regional groundwater gradient. Horizontal hydraulic gradients range from 0.003 to 0.005 vertical feet per horizontal foot in the upper portion of the aquifer, to 0.003 to 0.10 in the deeper portion of the aquifer (USAF 1998). The groundwater depth in the area of the Proposed Action is fairly consistent. MW222x37 is closest to the Proposed Action. MW1208x37 is also in the vicinity. As reported in the Travis AFB 2001-2002 Annual GSAP Report, the depth of the groundwater at these two sites are 9.70 ft and 9.56 ft, respectively.

Groundwater monitoring is being conducted at Travis AFB through the Environmental Restoration Program (ERP). The unconfined aquifer has been affected by releases of hazardous substances from historic activities at the base (USAF 1998). These releases are addressed through the ERP, which conducts investigations and develops remediation strategies to clean up contamination. Contaminated groundwater is located at the proposed site. The closest monitoring well in the vicinity is MW222x37 (see Figure 2).

2.2.2 Surface Water

Local drainage patterns have been substantially altered by base activities. The major surface water feature on Travis AFB is Union Creek, which originates 3-miles north of the base. The main branch of Union Creek enters Travis AFB from the northeast.

Storm water runoff from Travis AFB is directed to Union Creek through a series of underground pipes, culverts, and open ditches. About 600 feet after it enters Travis AFB to the northeast, Union Creek is channeled into the base storm water drainage system. The creek resurfaces south of the main runway and exits the base along the southwestern boundary. After exiting Travis AFB, Union Creek flows 1.6-miles before discharging into Hill Slough, which is a seasonally and semi-permanently flooded wetland.

2.3 BIOLOGICAL RESOURCES

This section addresses ecological habitat and the presence of wildlife including threatened and endangered species.

2.3.1 Habitat

Vegetation and ecology of Travis AFB have been significantly altered by historic and ongoing land use activities. Vegetation at Travis AFB is subject to intensive management under a natural resource management plan. According to the Travis AFB *Integrated Natural Resources Management Plan* (INRMP), the proposed site for the APS facility is in the "Cantonment" Natural Resources Management Unit, and the ecological habitat of the proposed location is described as "airfield and industrial development." The current dominant use is industrial buildings and developed land. The proposed project site is presently a developed area currently used for aircraft operations and maintenance and industrial uses.

During habitat characterization, sensitive habitats (e.g., wetlands, vernal pools) were also identified in the resource management plan, if present. No sensitive habitats were found in the area proposed for the support facility. No ecological resources were observed to be within the immediate vicinity. Immediate vicinity is defined as an area that has the potential of being used during construction of the Proposed Action (i.e. construction equipment and construction materials).

On 24 September 2002, the US Fish and Wildlife Service (USFWS) proposed designation of Travis AFB as critical habitat for the following species: conservancy fairy shrimp (596 acres), Vernal Pool Fairy Shrimp (1879 acres), vernal pool tadpole shrimp (1879 acres), Contra Costa Goldfields (4828), Solano Grass (233 acres), and Colusa Grass (233 acres). To date the only species confirmed on Travis AFB are the Vernal Pool Fairy Shrimp and the Contra Costa Goldfields.

2.3.2 Wildlife and Threatened and Endangered Species

Wildlife found at Travis AFB during the base wide habitat characterization in 1995 was typical of central California grasslands. The most abundant representative wildlife found in the urban landscape includes ground squirrel (*Sperophilus beecheyi*), the western harvest mouse (*Reithrodontomys megalotis)*, song sparrow (*Melopiza melodia*), tri-colored blackbird (*Agelaius tricolor*), killdeer (*Charadrius vociferous*) and house sparrow (*Passer domesticus)* (USAF 2000).

One of the goals of the ecological habitat characterization conducted in 1994 and updated in 1999 and 2000 was to identify the presence of any threatened, endangered, or special status species. No threatened or endangered species or candidate species were identified in the area proposed for the APS facility.

2.4 HAZARDOUS WASTE MANAGEMENT

Any hazardous waste generated at the APS facility would be subject to the guidelines outlined in AFI 32-7086, *Hazardous Materials Management,* AFI 32-7042, *Solid and Hazardous Waste Compliance*, the *Travis Air Force Base Hazardous Waste Management Plan,* and the *Travis Air Force Base Environmental Flight Policy for Contractors*. Implementation of these guidelines would ensure that no significant impacts occur because of hazardous materials use and hazardous waste disposal. No significant hazardous materials or wastes issues are anticipated with the APS facility.

2.5 AIR QUALITY

Travis AFB is located in the southwestern portion of Solano County, which is part of the San Francisco Bay Area Air Basin (SFBAAB), and is administered by the Bay Area Air Quality Management District (BAAQMD). Air quality within any air basin is affected by the concentrations of various pollutants in the atmosphere. The amount of pollutants in the atmosphere is affected by the interaction of three factors: (1) the physical characteristics of the air basin, (2) the prevailing meteorological conditions within the air basin, and (3) the amount of pollution emitted into the atmosphere. The interrelationship of these three factors determines the measurable concentration of pollutants in the atmosphere. The objective of this analysis is to determine the Proposed Action's impacts on regional air quality. The information presented in this section includes a discussion of existing meteorological and topography conditions, regional air quality, and applicable federal, state, and local regulations.

2.5.1 Regional Climate

Prevailing winds are from the western marine regions. During the summer and fall, high pressure offshore coupled with low pressure in the Central Valley causes marine air to flow eastward through the region. The wind is strongest in the afternoon. Afternoon wind speeds can reach up to 15 to 20 miles per hour (mph) throughout the region. Annual average wind speeds are 8 mph in the city of Martinez, and 9 to 10 mph further east (BAAQMD 1999). Sometimes atmospheric conditions cause air to flow from the east. Winds from the east usually contain more pollutants than the cleaner marine air from the west. In the summer and fall, this can cause elevated pollutant levels to move into the central Bay Area and through the region. These high pressure periods are usually accompanied by low wind speeds, shallow mixing depths, higher temperatures and little or no rainfall.

Summer mean maximum temperatures in the region reach about 90 degrees Fahrenheit. Mean minimum temperatures in the winter are in the high 30s (BAAQMD 1999). Temperature extremes are especially pronounced in sheltered areas farther from the moderating effects of the strait itself, such as at Travis AFB.

2.5.2 Existing Air Quality

The Federal Clean Air Act (CAA) required the United States Environmental Protection Agency (USEPA) to establish ambient ceiling thresholds for certain criteria pollutants. Subsequently, the USEPA promulgated regulations that set the National Ambient Air Quality Standards (NAAQS). Two classes of standards were established: primary and secondary. Primary standards prescribe the maximum permissible concentration in the ambient air required to protect public health. Secondary standards specify levels of air quality required to protect public welfare, including materials, soils, vegetation, and wildlife, from any known or anticipated adverse effects. The criteria pollutants for which the NAAQS have been established include sulfur dioxide (SO_2), nitrogen oxides (NO_x), carbon monoxide (CO), ozone (O_3), particulate matter 2.5 microns or less in diameter ($PM_{2.5}$), particulate matter 10 microns or less in diameter (PM_{10}), reactive organic compounds, and lead (Pb).

California has also established its own air quality standards, known as the California Ambient Air Quality Standards (CAAQS). CAAQS are generally more stringent than the NAAQS and incorporate additional standards for sulfates (SO_4), hydrogen sulfide (H_2S), vinyl chloride, and visibility-reducing particulate matter. The NAAQS and CAAQS are presented in Table 2-1.

The USEPA classifies air quality within each Air Quality Control Region with regard to its attainment of federal primary and secondary NAAQS. According to USEPA guidelines, an area with air quality better than the NAAQS for a specific pollutant is designated attainment for that pollutant. Any area not meeting ambient air quality standards is classified "nonattainment." When there is a lack of data for the USEPA to define an area, the area is designated unclassified and treated as an attainment area until proven otherwise. Pollutant concentrations within the San Francisco Bay Area Air Basin atmosphere are assessed relative to the federal and state ambient air quality standards.

The BAAQMD is required to monitor air pollutant levels to ensure federal and state ambient air quality standards are met. If ambient air quality standards are not met, the BAAQMD must develop a plan to meet them. If air quality in the SFBAAB does not exceed government standards, the area is classified as an "attainment" area. If regional air quality contains pollutant levels violating these standards, the area is classified as a "nonattainment" area. The SFBAAB is in attainment for all standards except the federal and state ozone standards and the state standard for PM_{10}. The attainment status for the SFBAAB is summarized in Table 2-1.

Maximum measured pollutant concentrations and number of days of federal and state standards exceedance at three monitoring stations (Fairfield, Vacaville and Vallejo stations) near Travis AFB from 1999 through 2000 are presented in Table 2-2. The Fairfield Station, approximately five miles southwest of Travis AFB, is the closest station to the Proposed Action site. The Vacaville and Vallejo stations are located on the north and south of Travis AFB, respectively. Data from the stations represent the background pollutant conditions at the project site. The various criteria pollutants monitored within the SFBAAB are shown in Tables 2-1 and 2-2.

2.6 NOISE

The proposed project site is located near one of the runways of Travis AFB. Therefore, the site periodically is subject to loud or very loud levels of noise when flight operations are being conducted. The Air Installation Compatible Use Zone study for Travis AFB shows that the site for the Proposed Action is subject to noise levels of about 70 to 75 decibels (dB) during flight operations. Otherwise, noise levels are typical of an urban area (about 55 to 65 dB), due to traffic noise.

2.7 CULTURAL RESOURCES

This section addresses the cultural resources in the area of the proposed project at Travis AFB. Both prehistoric and historic resources (including architectural resources) are addressed in this discussion.

2.7.1 Cultural Resources Statutes and Significance Criteria

The National Historic Preservation Act, Executive Order 11593, the Archaeological and Historic Preservation Act, and the Archaeological Resources Protection Act are the primary statutes requiring federal agencies to protect cultural resources. The federal criteria for defining whether a cultural resource is significant are stated in the eligibility requirements for nomination to the National Register of Historic Places (NRHP). The National Park Service of the Department of the Interior maintains the NRHP. To qualify for the National Register, a property must possess integrity of location, design, setting, materials, workmanship, feeling, and association and meet one or more of the following eligibility criteria:

A. Association with events that have made a significant contribution to the broad patterns of history

B. Association with the lives of persons significant in the past

C. Embodies the distinctive characteristics of a type, period, or method of construction, represents the work of a master, possesses high artistic values, or represents a significant and distinguishable entity whose components may lack individual distinction

D. Has yielded, or may be likely to yield, information important in prehistory or history

The Native American Graves Protection and Repatriation Act provides for the disposition of any American Indian human remains and associated grave goods found on federal property to descendants.

2.7.2 Cultural Setting

Travis AFB lies within the area of central California occupied at the time of European contact by Penutian speaking groups. This area is considered within the range of the Suisun and Talenas tribelets of the Southern Patwin (or Wintuan), although little is known ethnographically about these groups. Many of the early inhabitants of this area established villages adjacent to freshwater marshes and subsisted by hunting, gathering, and fishing. By the time of Spanish contact, the foundations of an agricultural system had already been developed (Moeller et al. 1996). Missionization, disease, and disruption by gold-seeking miners and, later, settlers, adversely affected the Patwin. Subsequent to epidemics of malaria and smallpox in 1833 and 1837, the Southern Patwin had largely abandoned the area. A few descendants are located today in the northern part of their former range, in the Sacramento Valley.

Much of the area surrounding the Travis property was cultivated for agricultural products and grazing livestock, first by the Spanish during the Spanish Mission Period and later by Mexicans and Euro-Americans during the Mexican Period and early American Period. The land at and around Travis AFB was not considered prime farmland. It was historically used for sheep and cattle ranching and irrigated farming (Moeller et al. 1996). The first Hispanic settlement in Solano County was in 1840, and the first recorded Euro-American family settled near Travis AFB in approximately 1848. Various homesteads were established in this area until 1942, when the U.S. Government selected the property of the present-day Travis AFB as the site for an Army

Air Corps base (Moeller et al. 1996; Weitze 1996). The facility was commissioned as the Fairfield-Suisun Army Air Base in 1943, and was renamed Travis AFB in 1950 in honor of Brigadier General Robert Falligant Travis, former commander of the 9th Heavy Bombardment Wing.

2.7.3 Cultural Resources on the Project Site

There are no known NRHP-listed or eligible prehistoric or historic sites in the project site. A base-wide cultural resources survey of Travis AFB was conducted by the Environmental Assessment Division of the Argonne National Laboratory, and published as *An Archaeological and Historic Resources Survey and Inventory of Travis Air Force Base, Solano and Contra Costa Counties, California* (Moeller et al. 1996). This survey does not list any cultural resources as being present in or near the Proposed project site.

A second base-wide survey, and evaluation of properties on Travis AFB that might potentially be significant in the context of the Cold War was conducted by Geo-Marine, Inc. of Plano, Texas (Weitze 1996). The *Inventory of Cold War Properties* does not list any such property being present in the Proposed project site.

2.8 ENVIRONMENTAL JUSTICE

Executive Order 12898, Federal Actions to Address Environmental Justice in Minority Populations and Low-income Populations, requires federal agencies to identify and address, as appropriate, disproportionately high and adverse human health or environmental effects of their programs, policies, and activities on minority and low-income populations. No disproportionate effects on any minority or low-income populations would be expected for the following reasons:

- Potential impact from the Proposed Action would result primarily from construction activities that are expected to be minimal and short-term in duration.
- The Proposed Action is consistent with the current use of the area.

2.9 CUMULATIVE IMPACTS

Cumulative impacts are those changes to the environment that would result from the Proposed Action or Alternative in combination with recently completed actions and actions in progress along with reasonably foreseeable future actions.

The following is a list of projects considered as part of this cumulative impact analysis.

- Acoustical Facility
- RAPCON
- C-17 Beddown
- Coast Guard Beddown
- 110 Unit Housing Construction
- Repair/Upgrade Hydrant H System
- Construction of New School Youth Age Facility
- Relocation of Travis Air Museum

- Pacific Gateway Visitors Quarters Lodging Facility

No significant impacts would occur from the proposed action or the alternative action. As previously noted throughout this assessment, minor environmental impacts would occur during the period of construction but would not be of a lasting nature. As with this project, other projects have had or could have minor temporary impacts on the environment as noted in their associated environmental analysis. The most lasting impacts would be impacts to water and air. Cumulative impacts to water resources would be the effects of soil erosion on Union Creek. Construction sites on the installation utilize best management practices to prevent the runoff of disturbed soil into the storm drain system, which drains into Union Creek. Fugitive dust from construction sites over time has the potential to increase the particulate material in the air. However, use of required best management practices during soil disturbances keeps these impacts to an insignificant level. Overall, the construction occurring at Travis AFB primarily involves in fill activities with only a few projects actually expanding the development footprint on the installation. Therefore, the cumulative impacts of the proposed action are insignificant.

3.0 ENVIRONMENTAL CONSEQUENCES

This section discusses potential impacts from implementing the Proposed Action or the No Action Alternative. Impacts are usually defined as long-term (lasting well beyond the period of construction) or short-term (occurring during and immediately after construction activities). Long-term impacts can result from single events or because of small but cumulative impacts. Short-term impacts would be obvious and may be disruptive.

Adverse impacts may be mitigated through avoidance, minimization, remediation, reduction, or compensation. This document identifies Best Management Practices (BMPs) that may be useful or necessary to minimize environmental impacts of the Proposed Action. These discussions are described within each environmental component.

This section is organized by environmental component in the same order as introduced in Section 3.0. The analyses of the impacts of the Proposed Action, and the No Action Alternative are discussed for each environmental component.

3.1 GEOLOGY AND SOILS

The proposed project would have a significant impact on geology and soils if it resulted in substantial erosion or unstable soil conditions from excavation grading or fill or resulted in the loss of availability of known mineral resources that would be of future value to the region.

3.1.1 Proposed Action

Implementation of the Proposed Action would not impact the geology of the region. The proposed site is on a paved area and have low erosion potential. Construction activities would be of short duration and on a very localized site already containing permanent structures and landscaping. No significant impacts to soils would occur from the Proposed Action.

3.1.2 No Action Alternative

If the No Action Alternative were selected, current conditions would not change, and no impacts to geology and soils would occur.

3.2 WATER RESOURCES

The proposed project would have a significant impact on water quality and water resources if it would result in the degradation of water quality, cause a violation of drinking water maximum contaminant levels, or create public health concern by having a detrimental effect on existing potable water supplies during project construction or project operation.

3.2.1 Proposed Action

The Proposed Action is over contaminated groundwater. The proposed project site is on a paved surface and will have very little impact to groundwater. While contaminated groundwater is present at this location, it is 9-12 ft below ground surface. Construction of building foundations is shallow and will not reach the depth of contaminated groundwater. Short-term soil disturbances from construction activities could increase on-site soil erosion. Construction

personnel need to be aware that any digging below 9 ft could potentially bring contaminated groundwater to the surface. BMPs would be implemented during construction to minimize potential groundwater contamination and on-site erosion. The Soils at the Proposed project site have low erosion potential; therefore, impacts to water resources will be insignificant.

3.2.2 No Action Alternative

If this alternative were selected, current conditions would not change, and no impacts to water resources would occur.

3.3 BIOLOGICAL RESOURCES

The proposed project would have a significant impact on biological resources if it caused a substantial adverse effect on any species identified as a candidate, sensitive, or special-status species by the US Fish and Wildlife Service; had a substantial adverse effect on any protected wetland, riparian habitat or other sensitive natural communities; or conflicted with the provisions of the Integrated Natural Resource Management Plan established for Travis AFB (USAF 2000).

3.3.1 Proposed Action

While Travis AFB has been proposed as a critical habitat for various species, the Proposed Action does not possess the characteristics required to sustain the species mentioned in Section 2.3.1 of this environmental assessment. The ecological habitat of the proposed location for the APS facility is described as an industrial area. Lastly, no sensitive habitats or species were found in the area. Therefore, no direct or indirect impacts to ecological resources in question could result from activities associated with the Proposed Action. The area contemplated for construction of the APS Facility is on an existing paved surface. Therefore there are no biological resources present in this environment.

3.3.2 No Action Alternative

If the No Action Alternative were selected, current conditions would not change, and no impacts to biological resources would occur.

3.4 HAZARDOUS WASTE MANAGEMENT

3.4.1 Proposed Action

Hazardous waste issues may be of concern to the proposed project during the construction phase. Groundwater under the proposed site is contaminated with Trichloroethene. BMPs should be implemented during the soil excavation phase. The use of hazardous materials and the resultant hazardous wastes must be anticipated during the construction of the APS facility. During the construction phase, contractors who bring in hazardous materials must manage them and their wastes according to the *Travis Air Force Base Environmental Policy for Contractors (2002),* as well as Federal, State and local regulations and policies. The contractor shall ensure that hazardous material use is authorized, tracked, and managed in accordance with AFI 32-7086, *Hazardous Materials Management*, AMC Supplement 1, Chapter 2.

3.4.2 No Action Alternative

If the No Action Alternative were selected, current conditions would not change, and no additional impacts to hazardous waste management would occur.

3.5 AIR QUALITY

Criteria to determine the significance of air quality impacts are based on federal, state, and local air pollution standards and regulations. Impacts would be significant if project emissions (1) increase ambient pollutant levels from below to above an ambient air quality standard or (2) exceed annual thresholds that trigger a conformity analysis under the 1990 CAA.

3.5.1 Proposed Action

The Proposed Action could have potentially adverse short-term impacts to air quality from generation of fugitive dust during construction activities. Impacts would also be significant if emissions from project operations (post-construction) exceed thresholds the BAAQMD recommends for determination of significance for NEPA analyses. The BAAQMD does not consider combustive emissions from construction activities to be significant for the purpose of NEPA review because these emissions have already been considered in the regional attainment planning process (BAAQMD 1999). The BAAQMD requires implementation of a fugitive dust (PM_{10}) control measure from construction activities, to ensure that PM_{10} emissions during construction remain insignificant.

The pollutant emitting activities, emission sources, and resulting pollutants that would occur under the Proposed Action are listed in Table 3-1.

Construction-related emissions associated with the Proposed Action would consist of emissions from (1) earthmoving activities relating to the construction of the facility, (2) construction of a parking lot, and (3) exhaust emissions from construction equipment operations. Potential criteria pollutants resulting from these activities are particulate matter 10 microns or less in diameter (PM_{10}), carbon monoxide (CO), reactive organic gases (ROG), nitrogen oxides (NO_x), and sulfur oxides (SO_x). The construction activities are assumed to be completed in one year. For the Proposed Action, emissions are estimated using emission factors from the 1999 BAAQMD California Environmental Quality Act (CEQA) Guidelines – Assessing the Air Quality Impacts of Projects and Plans. Calculations for construction-related emissions are shown in Appendix B and results are summarized in Table 3-2.

A formal air conformity applicability analysis is required for the proposed project to ensure that the Proposed Action would comply with the implementation of the CAA and the BAAQMD rules and regulations. For SFBAAB federal regulations require that the total annual emissions of ROG, NO_x, or CO associated with the Proposed Action should not exceed the minimum threshold levels of 100 tons per year. Also, the 1999 BAAQMD CEQA guidelines states that the operation-related emissions should not exceed the project thresholds of 15 tons per year or 80 pounds per day for ROG, NO_x, or PM_{10} (BAAQMD 1999).

The thresholds mentioned above are compared to the estimated emissions for the Proposed Action's construction emissions on Tables 3-3 and 3-4 to determine the project's conformity

applicability. Results shown in the tables indicate that the total direct and indirect emissions from the construction of the Proposed Action at Travis AFB would not exceed the federal and BAAQMD minimum conformity threshold values for PM_{10}, ROG, NO_x, and CO. Therefore, the Proposed Action is deemed *de minimis* and not regionally significant, and is exempt from further conformity requirements, in accordance with conformity requirements set forth in 40 CFR 93, Section 176 (c) (4) of the CAA, and 1999 BAAQMD CEQA Guidelines.

3.5.2 No Action Alternative

If the No Action Alternative were selected, current conditions would not change, and no additional impacts to air quality would occur.

3.6 NOISE

Impacts on noise are considered significant if the proposed project would substantially increase the ambient noise levels for adjoining areas or generate long-term stationary source noise that would result in a noticeable increase in daily average noise levels of greater than 3 dB.

3.6.1 Proposed Action

Although noise levels would increase slightly during construction operations, the increase would be temporary. Methods used to determine noise impacts were based on identifying sensitive receptors near the site and evaluating potential noise sources. Noise from operation of construction equipment would be evident only in the immediate area of operations. Noise levels would be adverse if sensitive human receptors are subjected to noise levels approximately 20 dB higher than current ambient levels. Equipment would be limited to typical heavy construction items, such as bulldozers, excavators or front-end loaders, and dump trucks. Sound levels for heavy diesel equipment at a construction site would be about 80 dB. For comparison, an automobile generates 60 dB at 50 feet, and jet aircraft generates greater than 100 dB at 1,000 feet. It is anticipated that the construction period would be approximately six months.

No sensitive human receptors live adjacent to the Proposed project site. Noise from construction would be minimal to office workers located in Building 977. Buildings normally attenuate 20 to 30 dB with windows closed. With this level of attenuation, construction noise levels would be less than ambient levels. Therefore, no significant impacts should occur.

3.6.2 No Action Alternative

If the No Action Alternative were selected, current conditions would not change, and no additional impacts to noise levels would occur.

3.7 CULTURAL RESOURCES

Impacts on cultural resources are considered significant if a property listed on or eligible for listing on the NRHP would be physically damaged or altered.

applicability. Results shown in the tables indicate that the total direct and indirect emissions from the construction of the Proposed Action at Travis AFB would not exceed the federal and BAAQMD minimum conformity threshold values for PM_{10}, ROG, NO_x, and CO. Therefore, the Proposed Action is deemed *de minimis* and not regionally significant, and is exempt from further conformity requirements, in accordance with conformity requirements set forth in 40 CFR 93, Section 176 (c) (4) of the CAA, and 1999 BAAQMD CEQA Guidelines.

3.5.2 No Action Alternative

If the No Action Alternative were selected, current conditions would not change, and no additional impacts to air quality would occur.

3.6 NOISE

Impacts on noise are considered significant if the proposed project would substantially increase the ambient noise levels for adjoining areas or generate long-term stationary source noise that would result in a noticeable increase in daily average noise levels of greater than 3 dB.

3.6.1 Proposed Action

Although noise levels would increase slightly during construction operations, the increase would be temporary. Methods used to determine noise impacts were based on identifying sensitive receptors near the site and evaluating potential noise sources. Noise from operation of construction equipment would be evident only in the immediate area of operations. Noise levels would be adverse if sensitive human receptors are subjected to noise levels approximately 20 dB higher than current ambient levels. Equipment would be limited to typical heavy construction items, such as bulldozers, excavators or front-end loaders, and dump trucks. Sound levels for heavy diesel equipment at a construction site would be about 80 dB. For comparison, an automobile generates 60 dB at 50 feet, and jet aircraft generates greater than 100 dB at 1,000 feet. It is anticipated that the construction period would be approximately six months.

No sensitive human receptors live adjacent to the Proposed project site. Noise from construction would be minimal to office workers located in Building 977. Buildings normally attenuate 20 to 30 dB with windows closed. With this level of attenuation, construction noise levels would be less than ambient levels. Therefore, no significant impacts should occur.

3.6.2 No Action Alternative

If the No Action Alternative were selected, current conditions would not change, and no additional impacts to noise levels would occur.

3.7 CULTURAL RESOURCES

Impacts on cultural resources are considered significant if a property listed on or eligible for listing on the NRHP would be physically damaged or altered.

3.7.1 Proposed Action

Base-wide cultural resources surveys, including an archaeological survey and an inventory of potentially significant Cold War properties, did not record any prehistoric or historic resources of any kind near the Proposed project site. The area is not known to be significant for traditional cultural values to local Native American cultural groups. Consequently, locating the APS facility on the proposed site would not have any significant impacts on cultural resources and no mitigation measures would be required.

If prehistoric or historic artifacts are encountered during land disturbance, activities in the immediate area of the finds shall be halted and a qualified archaeologist shall assess the finds, determine their significance, and make recommendations for appropriate mitigation measures. If human remains are encountered on the property, then the County Coroner's Office shall be contacted within 24 hours of the find, and all work shall be halted until a clearance is given by that office and other involved agencies.

3.7.2 No Action Alternative

If the No Action Alternative were selected, current conditions would not change, and no impacts to cultural resources would occur.

3.8 ENVIRONMENTAL JUSTICE

Executive Order 12898, Federal Actions to Address Environmental Justice in Minority Populations and Low-income Populations, requires federal agencies to identify and address, as appropriate, disproportionately high and adverse human health or environmental effects of their programs, policies, and activities on minority and low-income populations.

3.8.1 Proposed Action

The Proposed Action would not cause any disproportionate effects on any minority or low-income populations because the Proposed Action would occur on Travis AFB. The closest non-military community is 5 miles from the proposed site.

3.8.2 No Action Alternative

If the No Action Alternative were selected, current conditions would not change, and no impacts to would occur.

3.9 COMPARISON OF THE PROPOSED ACTION AND NO ALTERNATIVE

Table 3-1 summarizes and compares the potential effects of the Proposed Action to the No Action Alternative. Neither the Proposed Action nor the No Action Alternative would result in any significant impacts on the environment if the suggested BMPs were implemented during construction of the APS facility.

PERSONS AND AGENCIES CONTACTED

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B.S., 1972, Plant Science, Arizona State University, Phoenix, AZ.

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FIGURES

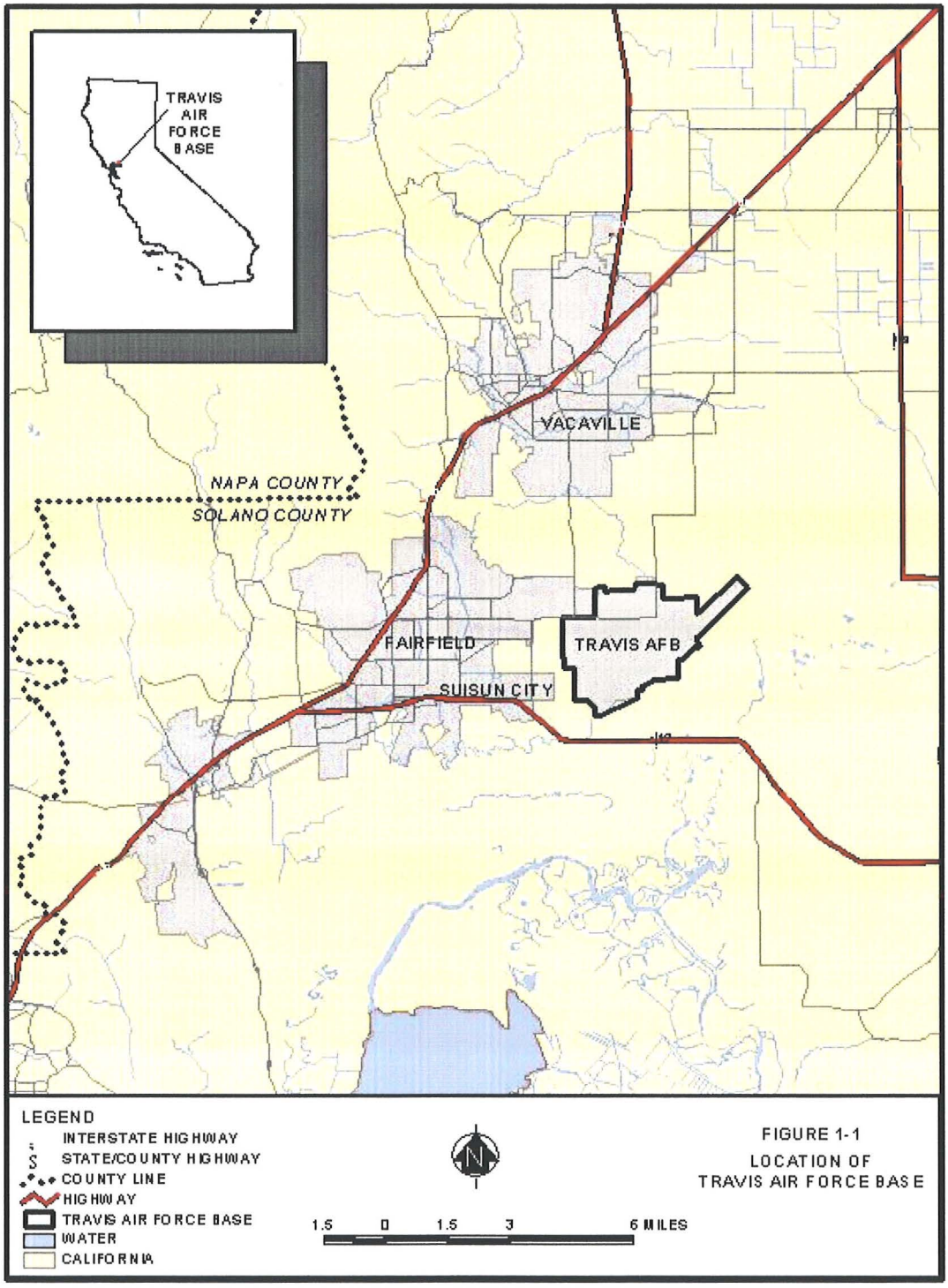

Figure 1. Location of Travis AFB

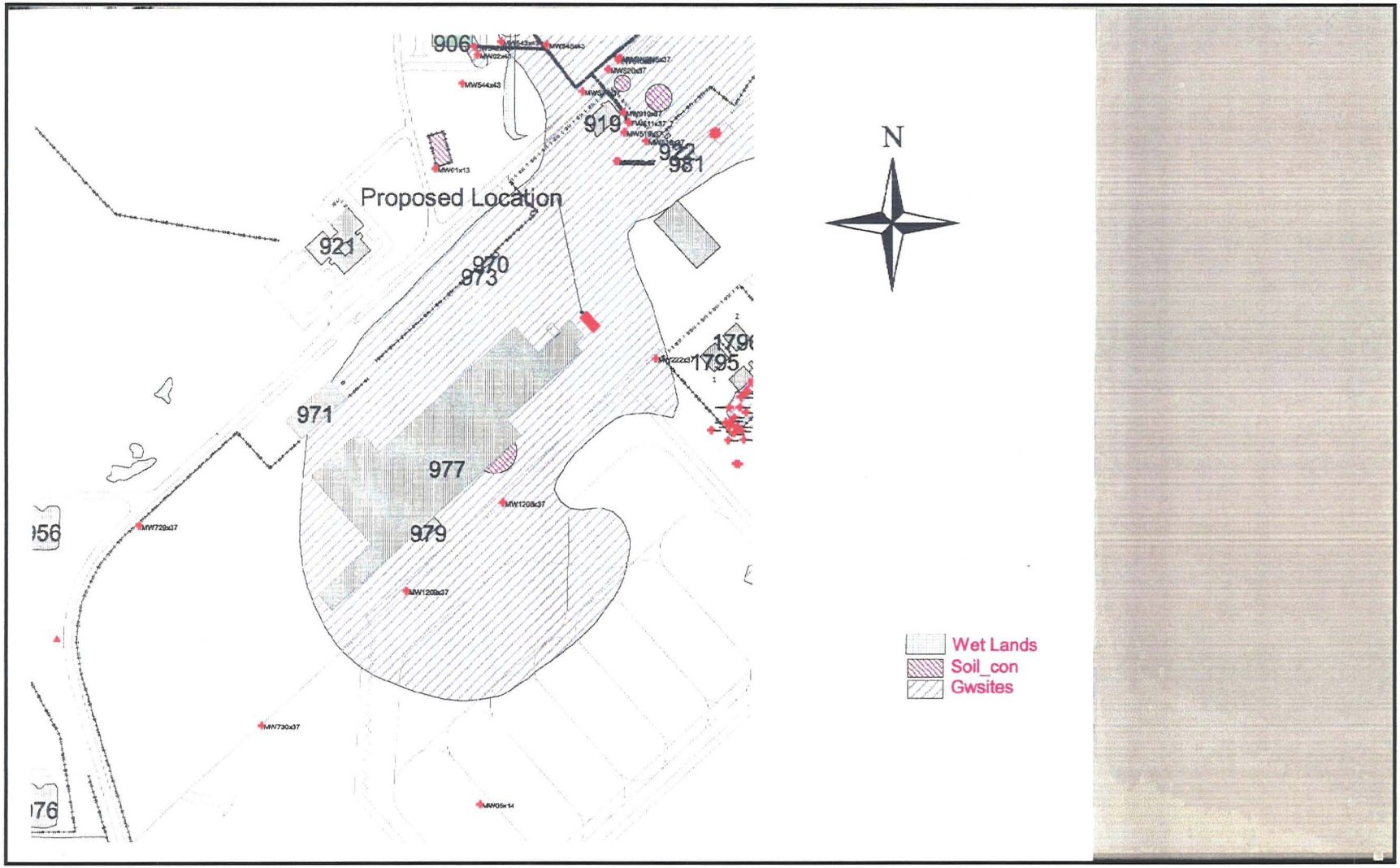

Figure 2. Proposed Location of APS Facility

TABLES

Table 2-1
Ambient Air Quality Standards And Bay Area Air Quality Management District Attainment Status

Pollutant	Averaging Time	California Standards		National Standards	
		Concentration[1]	Attainment Status[2]	Concentration[1]	Attainment Status[2]
Ozone	8 hour			0.08 ppm	U
	1 hour	0.09 ppm (180 µg/m^3)	N	0.12 ppm (235 µg/m^3)	N
Carbon Monoxide	8 hour	9 ppm (10 mg/m^3)	A	9 ppm (10 mg/m^3)	A
	1 hour	20 ppm (23 mg/m^3)	A	35 ppm (40 mg/m^3)	A
Nitrogen Dioxide	Annual average			0.053 ppm (100 µg/m^3)	A
	1 hour	0.25 ppm (470 µg/m^3)	A		
Sulfur Dioxide	Annual average			80 µg/m^3 (0.03 ppm)	A
	24 hour	0.04 ppm (105 µg/m^3)	A	365µg/m^3 (0.14 ppm)	A
	1 hour	0.25 ppm (655 µg/m^3)	A		
Particulate Matter (PM_{10})	Annual arithmetic mean			50 µg/m^3	A
	Annual geometric mean	30 µg/m^3	A		
	24 hour	50 µg/m^3	N	150 µg/m^3	U
Particulate Matter – Fine ($PM_{2.5}$)	Annual arithmetic mean			15 µg/m^3	U
	24 hour			65 µg/m^3	U
Sulfates	24 hour	25 µg/m^3	A		
Lead	Calendar quarter			1.5 µg/m^3	A
	30 day average	1.5 µg/m^3	A		
Hydrogen Sulfide	1 hour	0.03 ppm (42 µg/m^3)	U		
Vinyl Chloride	24 hour	0.010 ppm (26 µg/m^3)	No information available		
Visibility Reducing Particles[3]	8 hour (1,000 to 1,800 PST[4])	See notes	U		

Notes: 1 - ppm = parts per million; µg/m^3 = micrograms per cubic meter; and mg/m^3 = milligrams per cubic meter
2 - A = attainment; N = nonattainment; and U = unclassified
3 - The visibility-reducing particles standard is intended to limit the frequency and severity of visibility impairment from regional haze and is equivalent to a 10-mile nominal visual range. The standard is: particles in sufficient amount to produce an extinction coefficient of 0.23 per kilometer when the relative humidity is less than 70 percent.
4 - PST = Pacific Standard Time

Table 3-1
Proposed Action Emission Activities, Source, and Potential Pollutant from Emission Activity

Emission Activity	Source	Potential Pollutant
Construction	Earthmoving Construction Equipment Operation	PM_{10}; CO; ROG; NO_x; and SO_x
Operation	None	None

Notes: PM_{10} = particulate matter 10 microns or less in diameter
CO = carbon monoxide
ROG = reactive organic gasses
NO_x = nitric oxide
SO_x = sulfur oxide

Table 3-2
Proposed Action Construction-related Emissions

Pollutant	Total Emission (tons/yr)
PM_{10}	0.0369
CO	0.0867
ROG	0.0058
NO_x	0.0266
SO_x	0.0029

Notes: Emissions for construction activities (clearing, excavating, grading, paving, building) are based on emission factors from EPA AP-42 (EPA 1995).

PM_{10} = particulate matter 10 microns or less in diameter
CO = carbon monoxide
ROG = reactive organic gasses
NO_x = nitric oxide
SO_x = sulfur oxide
tons/yr = tons per year

Table 3-3
Federal Conformity Significance Determination

Activities	Pollutant	Total Emissions (tons/yr)	Federal Threshold (tons/yr)	Significance (Yes/No)
Construction				
	CO	0.0867	100	No
	ROG	0.0058	100	No
	NO_x	0.0266	100	No

Notes: CO = carbon monoxide
ROG = reactive organic gasses
NO_x = nitric oxide
tons/yr = tons per year

Table 3-4
Comparisons of the Proposed Action and Alternative for the Aerial Port Squadron Facility

Resource	Proposed Action	No Action Alternative
Geology and Soils	No impacts on regional geology would occur. Potential for soil erosion exists, but impacts would not be significant because of short duration of ground disturbance during construction period.	Current conditions would not change; therefore, no impacts to geology and soils would occur.
Water Resources	Short-term increase in soil erosion could lead to increased runoff and sedimentation in the storm water drainage system. Implementation of suggested Best Management Practices would minimize soil erosion. Impacts to water resources would not be significant.	Current conditions would not change; therefore, no impacts to water resources would occur.
Biological Resources	No impacts to native biological resources would occur.	Current conditions would not change; therefore, no impacts to biological resources would occur.
Hazardous Waste Management	BMP must be implemented due to contaminated groundwater. The use of hazardous materials and the resultant hazardous wastes must be anticipated during the construction of APS facility.	Current conditions would not change. No impacts to hazardous waste management would occur.
Air Quality	Short-term impacts to air quality might occur from generation of fugitive dust during construction. BAAQMD enhanced fugitive dust control measures would be implemented to minimize the impacts and to keep them below significant levels.	Current conditions would not change; therefore, no impacts to air quality would occur.
Noise	Noise levels would increase slightly during construction, but would be less than ambient levels, which are affected by nearby aircraft operations. Impacts would not be significant.	Current conditions would not change; therefore, noise impacts would not occur.
Cultural Resources	Base-wide cultural resources survey did not identify any cultural resources on the proposed site. Therefore, no impacts to cultural resources are expected.	Base-wide cultural resources survey did not identify any cultural resources on the alternative site. Therefore, no impacts to cultural resources are expected.

Notes: BAAQMD = Bay Area Air Quality Management District

APPENDIX A

REQUEST FOR ENVIRONMENTAL IMPACT ANALYSIS

AIR FORCE FORM 813

REQUEST FOR ENVIRONMENTAL IMPACT ANALYSIS

Report Control Symbol RCS: 02-52

INSTRUCTIONS: *Section I to be completed by Proponent; Sections II and III to be completed by Environmental Planning Function. Continue on separate sheets as necessary. Reference appropriate item number(s).*

SECTION I - PROPONENT INFORMATION

1. TO *(Environmental Planning Function)*	2. FROM *(Proponent organization and functional address symbol)*	2a. TELEPHONE NO.
60 CE/CEV	60 CE/CECS	4-0902

3. TITLE OF PROPOSED ACTION
Construct APS Ramp Facility

4. PURPOSE AND NEED FOR ACTION *(Identify decision to be made and need date)*
See Pg 2

5. DESCRIPTION OF PROPOSED ACTION AND ALTERNATIVES *(DOPAA) (Provide sufficient details for evaluation of the total action.)*
See Pg 2

6. PROPONENT APPROVAL *(Name and Grade)*	6a. SIGNATURE	6b. DATE
GEORGE K HAMILTON, MSgt, USAF Superintendent, SABER	George K Hamilton	15 Aug 02

SECTION II - PRELIMINARY ENVIRONMENTAL SURVEY. *(Check appropriate box and describe potential environmental effects including cumulative effects.) (+ = positive effect; 0 = no effect; - = adverse effect; U = unknown effect)*	+	0	-	U
7. AIR INSTALLATION COMPATIBLE USE ZONE/LAND USE *(Noise, accident potential, encroachment, etc.)*		0		
8. AIR QUALITY *(Emissions, attainment status, state implementation plan, etc.)*		0		
9. WATER RESOURCES *(Quality, quantity, source, etc.)*		0		
10. SAFETY AND OCCUPATIONAL HEALTH *(Asbestos/radiation/chemical exposure, explosives safety quantity-distance, bird/wildlife aircraft hazard, etc.)*		0		
11. HAZARDOUS MATERIALS/WASTE *(Use/storage/generation, solid waste, etc.)*		0		
12. BIOLOGICAL RESOURCES *(Wetlands/floodplains, threatened or endangered species, etc.)*		0		
13. CULTURAL RESOURCES *(Native American burial sites, archaeological, historical, etc.)*		0		
14. GEOLOGY AND SOILS *(Topography, minerals, geothermal, Installation Restoration Program, seismicity, etc.)*		0		
15. SOCIOECONOMIC *(Employment/population projections, school and local fiscal impacts, etc.)* N/A				
16. OTHER *(Potential impacts not addressed above.)* JA		0		

SECTION III - ENVIRONMENTAL ANALYSIS DETERMINATION

17. ☐ PROPOSED ACTION QUALIFIES FOR CATEGORICAL EXCLUSION (CATEX) # _____ ; OR
☒ PROPOSED ACTION DOES NOT QUALIFY FOR A CATEX; FURTHER ENVIRONMENTAL ANALYSIS IS REQUIRED.

18. REMARKS GROUNDWATER UNDER PROPOSED SITE, IS CONTAMINATED WITH TRICHLOROETHENE. SEE ATTACHED SHEET. Dale Mabrey 4-7520

19. ENVIRONMENTAL PLANNING FUNCTION CERTIFICATION *(Name and Grade)*	19a. SIGNATURE	19b. DATE
Troy Martinson, GS13		9/13/02

4. Purpose and Need for Action

a. The purpose of this action is to construct a new facility for the Aero Port Squadron (APS)

b. The current facility (Bldg 979, Ramp Trailer) was constructed during the 1980's as a temporary facility until a new facility could be funded. The facility is approximately 1400 sf and is inadequate in size for the 80+ personnel who occupy the building. Also, the trailer has no running water or restrooms available. This is a serious quality of life issue for the personnel who are required to stay in the immediate work area during their entire shift. The current location is also in close proximity to an active parking ramp and requires an airfield waiver.

5. Description of Proposed Action and Alternatives

a. 60 CES/SABER proposes to construct a new facility at the location identified on the attached map. The new location will conform to airfield siting standard and will clear the airfield waiver associated with the current location. The new location also brings the building into proximity of existing utilities allowing for complete utility hook-ups. The building will be a 2400 sf, pre-engineered slab on grade structure. Construction will include stucco siding, standing metal seam roof, offices, restrooms, a large break area and a locker room area. All construction will conform to ADA standards.

b. Decision: This facility has been funded and proposed site has been approved by the Wing Facilities Board. CEV must determine if the proposed site is satisfactory.

c. Anticipated Environmental Issues: Noise

d. Selection Criteria:

(1) Operational requirements: Building must be located in close proximity to the airfield ramp to accommodate the mission of the personnel in the building.

(2) Location: Location close to existing utilities is crucial to achieve the most building for the construction dollar, greater distances for utility runs equates to constructing a smaller building.

e. Alternatives:

Alternative 1: No-Action: This alternative the proposed Ramp Facility would not be constructed. Personnel would remain in and undersized building without running water or restrooms.

Alternative 2: Prefered: The preferred alternative is to construct the facility as proposed. This option gives us the best facility for our construction dollar.

Alternative 3: Construct in the current location: Because of the waiver requirements, this option limits the size of the new building to the current footprint. This location is also 1000' from the nearest sewage line which takes money away from the construction of the actual facility.

f. Permits: AF 103, Work Clearance Request

FORM 813

TO: ~~DIG PERMIT~~ REQUESTER

FROM: 60 CES/CEV - Base Environmental Management

REQUEST FO ENVR. IMPACT ANALYSIS

The following procedure(s), identified by a [√] or [X] , must be followed in reference to this ~~Dig~~ ~~Permit #~~ 02-52 .

[ ] Soil at this site is contaminated. Use proper safety procedures when handling. Disposal of ANY soil from this site must be coordinated with the Environmental Flight, Environmental Specialist, Steve Stopher, at 424-4271, Fax 424-0833.

[X] Site contains contaminated groundwater. If crews encounter any groundwater, contact Environmental Flight Environmental Specialist, Steve Stopher at 424-4271, Fax 424-0833.

[ ] Site contains reclaimed water sprinkler system. SEE ATTACHED MAP(S). If crews damage or have any questions about the system, contact Environmental Flight, Environmental Engineer Tom Sreenivasan at 424-3172, Fax 424-0833.

[ ] Dig site encroaches on or is in close PROXIMITY TO VERNAL POOL AREA(S) containing endangered species of plants or animals. DO NOT START ANY OPERATIONS IN THE AREA. Contact Base Agronomist Bob Holmes at 424-3897, Fax 424-5105.

[ ] Disposal of ANY LEFTOVER SOILS as a result of your operations must be coordinated with Environmental Flight, Environmental Specialist Steve Stopher at 424-4271, Fax 424-0833. Coordination must take place 5 working days prior to actual movement/disposal.

[X] Disposal of ANY ASPHALT OR CONCRETE: must be recycled at an off base recyling facility (for example CON CRUSH). Total amount of tons must be identified on manifest, copy forwarded to Environmental Flight Recycling Manager Dolores Tiburcio. May be faxed to: (707) 424-5105; attention: Dolores. Reporting must take place within 5 working days after actual movement/disposal.

[ ] MONITORING WELLS are in or near this site: These monitoring wells are not to be disturbed. Before any monitoring well can be disturbed, permission to do so must be received from Environmental Flight, Environmental Specialist Steve Stopher at 424-4271, Fax 424-0833.

APPENDIX B

MEMORANDUM FOR RECORD CONCERNING PROJECT XDAT 02-1051

DEPARTMENT OF THE AIR FORCE

60TH AIR MOBILITY WING (AMC)

29 May 2003

MEMORANDUM FOR 60 AMW/CC

FROM: 60 AMW/JA

SUBJECT: Aerial Port Squadron Facility Environmental Assessment (EA) Legal Review

I have reviewed the attached environmental assessment regarding the construction of a new Aerial Port Squadron Facility and find it to be legally sufficient. The document clearly articulates the need and scope of the action. Because this is the result of an Environmental Impact Analysis Program (EIAP) failure, the only additional action analyzed is the no action alternative. No comments were received during the public comment period. The analysis of the impacts to environmental resources substantiates a Finding of No Significant Impact (FONSI) for the proposed action. Should you have further questions I can be reached at 4-3251.

S. DEANN LEHIGH
Attorney Advisor

I concur

ANDREA M. ANDERSEN, Colonel, USAF
Staff Judge Advocate

APPENDIX C

AIR QUALITY EMISSION CALCULATIONS

PROPOSED ACTIONS CONSTRUCTION EMISSIONS CALCULATIONS AND TECHNICAL ASSUMPTIONS

Construction-related emissions associated with the Proposed Action at Travis Air Force Base (AFB) consist of earthmoving activities and construction equipment operations. For the Proposed Action, anticipated construction-related emissions were calculated based on data available at the time of this study. The calculations and technical assumptions used in the construction-related emissions calculations are presented in the following.

Construction-Related Emissions

Construction-related emissions associated with the Proposed Action would consist of emissions from (1) earthmoving activities during construction of a 2400 ft^2 United States Air Force (USAF) APS facility (2) exhaust emissions from construction equipment operations. The technical assumptions, emission calculations, and summary of total constructed-related emissions are presented in the following.

Earthmoving Activities Emissions

Earthmoving activities emissions come from a variety of activities such as excavation, grading, vehicle travels on paved and unpaved surfaces, and landscaping. The primary criteria pollutant associated with earthmoving activities would be particulate matter 10 microns or less in diameter (PM_{10}). The Proposed Action is anticipated to generate .037 tons of PM_{10} per year as a result of earthmoving activities.

The methodologies and technical assumptions used to estimate the anticipated earthmoving emissions are summarized in the following and the estimated emission results are presented in Table B-1.

- Earthmoving PM_{10} emissions are estimated using the emission factor (0.77 tons of PM_{10} per acre disturbed per month) from the 1999 Bay Area Air Quality Management District (BAAQMD) California Environmental Quality Act (CEQA) Guidelines – Assessing the Air Quality Impacts of Projects and Plans.
- The Proposed Action is anticipated to disturb an area of approximately .2 acres during earthmoving activities.
- Earthmoving activities are anticipated to have a duration of 1 week.

The following equation was used to estimate the Proposed Action's earthmoving activities PM_{10} emissions.

$$E_{PM10} = E_F A D$$

where

E_{PM10} = Earthmoving activities emission rate of PM_{10} (tons per year [tons/yr])
E_F = Earthmoving activities emission factor (tons per acre per month [tons/acre/month])
A = Area disturbed (acre)

D = Duration of earthmoving activities (months)

Equipment Exhaust Emissions

In addition to particulate emissions from earthmoving and demolition, air pollutions including PM_{10}, carbon monoxide (CO), reactive organic gasses (ROG), nitric oxide (NO_x), and sulfur oxide (SO_x) are also anticipated to be emitted from the exhaust of construction equipment. The construction equipment represents a composite fleet of heavy and light duty construction equipment such as excavator, front-end loader, backhoe, dozer, grader, scraper, tractor, and crane. The estimated total emissions associated with the project's equipment exhaust for PM_{10}, CO, ROG, NO_x, and SO_x emissions are 0.037, 0.087, 0.006, 0.027, and 0.003 tons per year, respectively.

The methodologies and technical assumptions used to calculate the Proposed Action's equipment exhaust emissions are summarized in the following.

- Construction equipment exhaust is estimated using emission factors from the 1999 BAAQMD CEQA Guidelines. They are 2.2, 138.0, 9.2, 42.4, and 4.6 grams per cubic yard of earth moved for PM_{10}, CO, ROG, NO_x, and SO_x, respectively.
- A total of 570 cubic yards or 15,390 cubic feet of earth is anticipated to be moved as a result of the Proposed Action.
- The Proposed Action would have a duration of 6 months.

The following equation was used to estimate the Proposed Action's equipment exhaust PM_{10}, CO, ROG, NO_x, and SO_x emissions.

$E = (E_F V/D)/907{,}184.74$

where

E = Equipment emission rate of PM_{10} CO, ROG, NO_x, or SO_x (tons/yr)
E_F = Equipment emission factor of PM_{10} CO, ROG, NO_x, or SO_x (grams per cubic yard [g/yd^3])
V = Volume of earth moved (cubic yard [yd^3])
D = Duration of equipment operation (yr)
907,184.74 = Grams to ton conversion factor (grams per ton [g/ton])

Table B-1
Construction-Related Emissions

Pollutant[1]	Activities	Emission Factor[2]	Emission Factor Unit	Area Disturbed (acre)	Volume of Earth Moved (yd^3)	Duration (year)	Emissions (tons/yr)	Total Emissions (tons/yr)
	Earthmoving	0.77	(tons/acre/month)	.2		1/52	0.0355	
	Demolition (NA)				NA	NA	NA	
PM_{10}	Equipment Exhaust	2.2	(g/yd^3)	-	570	.5	0.0014	0.0369
CO	Equipment Exhaust	138.0	(g/yd^3)	-	570	.5	0.0867	0.0867
ROG	Equipment Exhaust	9.2	(g/yd^3)	-	570	.5	0.0058	0.0058
NO_x	Equipment Exhaust	42.4	(g/yd^3)	-	570	.5	0.0266	0.0266
SO_x	Equipment Exhaust	4.6	(g/yd^3)	-	570	.5	0.0029	0.0029

Notes: 1– PM_{10} = particulate matter 10 microns or less in diameter; CO = carbon monoxide; ROG = reactive organic gasses; NO_x = nitric oxide; and SO_x = sulfur oxide.
2 – Emissions factors are from the 1999 Bay Area Air Quality Management District (BAAQMD) California Environmental Quality Act (CEQA) Guidelines – Assessing the Air Quality Impacts of Projects and Plans.
tons/acre/month = tons per acre per month
lbs/ft^3 = pounds per cubic feet
g/ft^3 = grams per cubic feet
g/yd^3 = grams per cubic yard
yd^3 = cubic yards
ft^3 = cubic feet
tons/yr = tons per year